

# Demystifying Prototyping

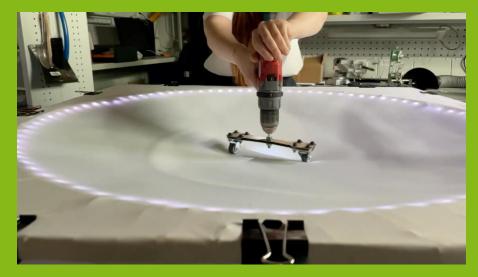


CBI A3 2022

Dina Zimmerman & Ole Werner

#### Prototype workshops

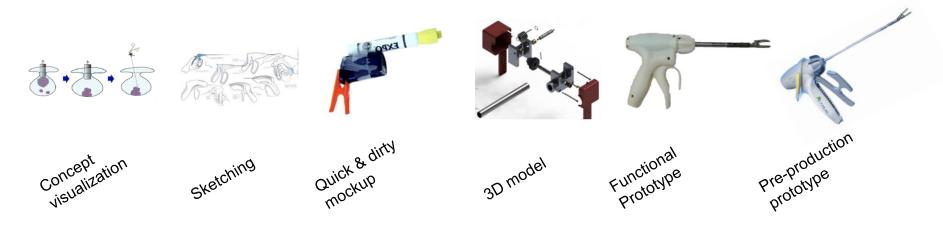
CERN



# Example of a product prototype

Low fidelity

High fidelity

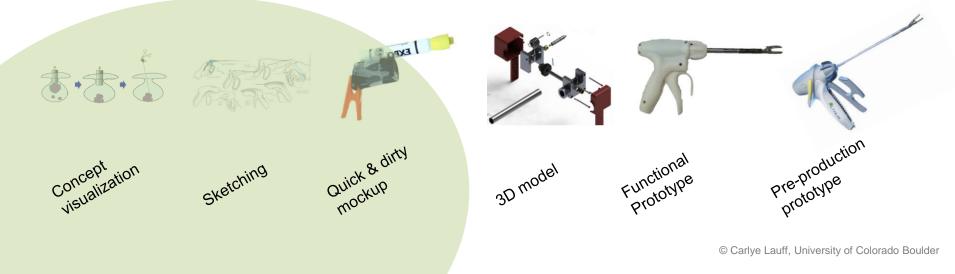


## Example of a product prototype

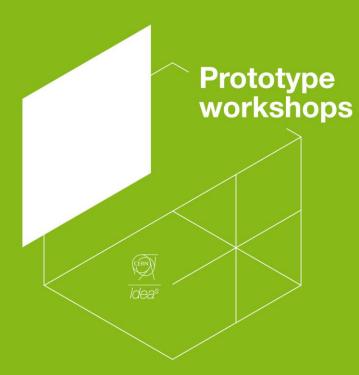
Low fidelity

**High fidelity** 

#### THIS WEEK'S FOCUS AREA



Physical O F Ø 0.00 0 </> 8 Digital D / process Service Je Je Berger Market R. 60 **Fidelity** 

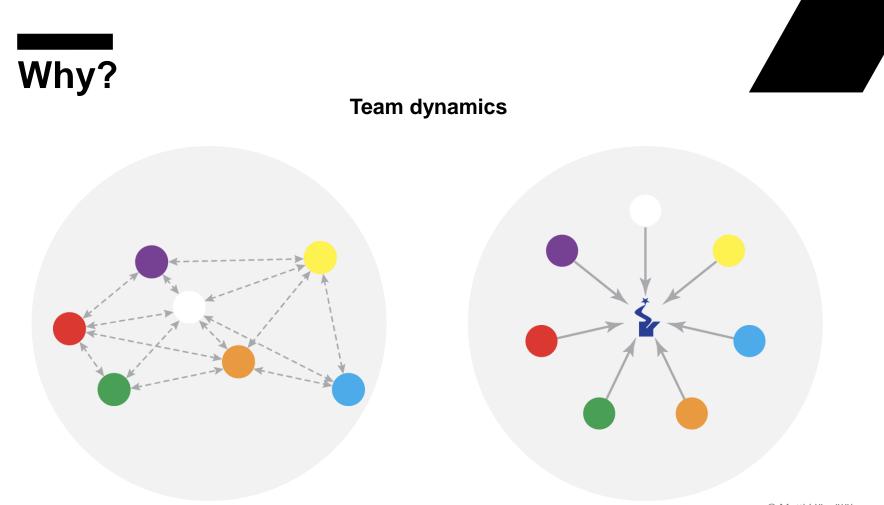


Why? What? When? How?

# Why?

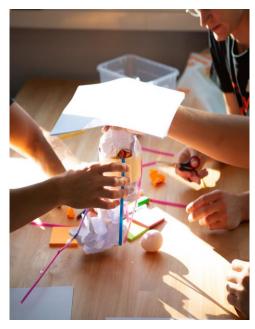


- Communication
  - Internal
  - External
- Ideation build to think!
- Testing
  - Assumptions
  - Functions
  - Problem description
- Joy of (co-)creation



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### What?



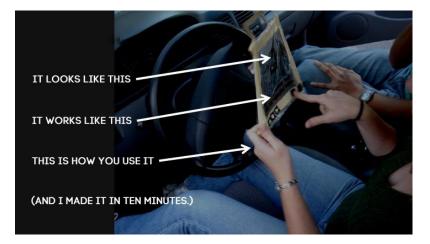
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- Function
- Experience
- Interaction
- Scenarios
- Feasibility
- Viability



# When?





<sup>©</sup> Larry Leifer, inno.space

- All stages of the project that require:
  - Getting feedback
  - Testing functions
- Whenever facing new ideas & direction

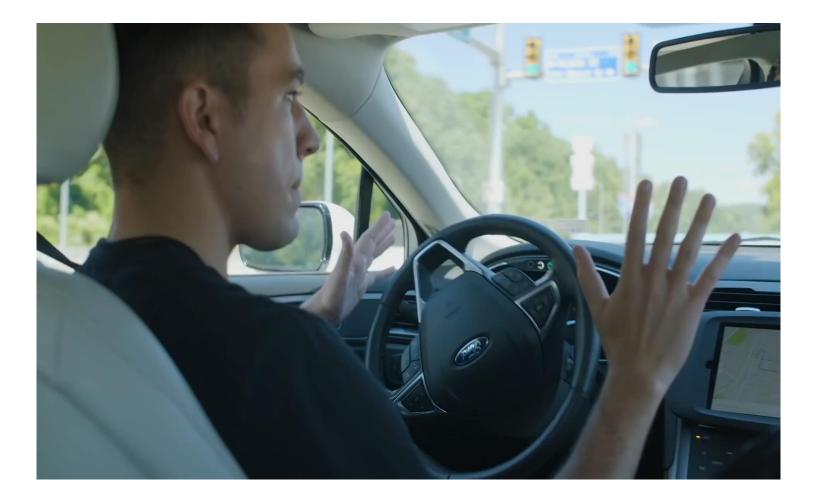
#### → As early as possible, as frequently as feasible

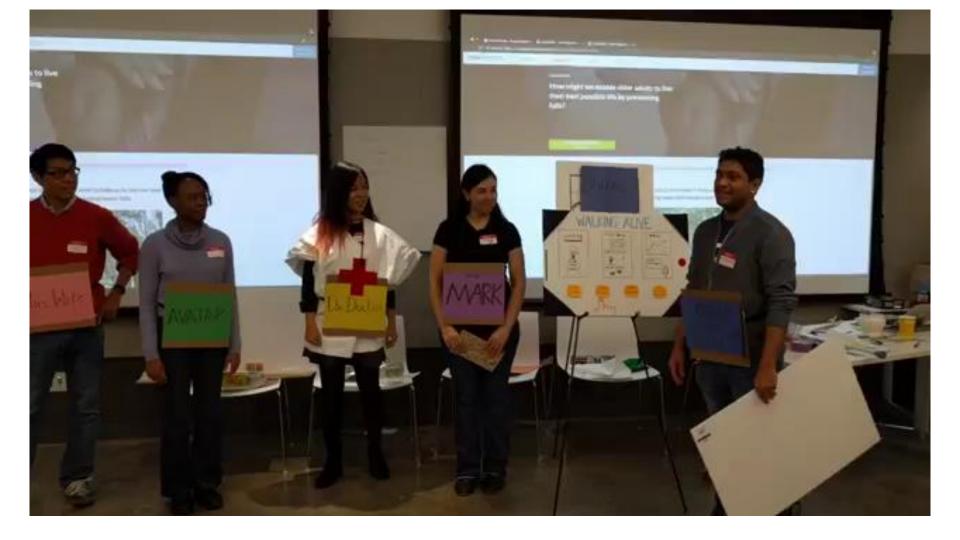
## How?



- i. Sketching
- ii. Role-Play
- iii. Storyboard
- iv. Cardboard Mock up
- v. Wizard of Oz
- vi. Wireframing

- *i.* Functional Prototype
- ii. Critical function prototype
- iii. Virtual Prototype
- iv. Proof of concept
- v. Minimum Viable Product
- vi. Pre-Production Prototype vii. ...





# How?



- Prototyping guidelines:
  - 1. Just do(ing) it
  - 2. Don't spend too much time
  - 3. Remember your aim (testing, interaction, experience etc..)
  - 4. Remember your target audience (internal, external)
  - 5. Document, document, document

© Aaron Down

"After the idea, there is plenty of time to learn the technology" James Dyson

# **Workshop practicalities**

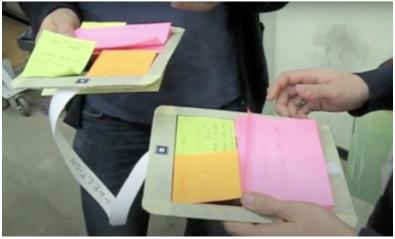




Future Technology for Sustainable Fashion 2022

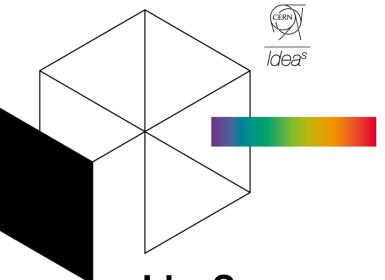
- Paper, cardboard & other low fidelity materials freely available
- Handtools recommended
- Want to use our machines? Ask before doing so, we're happy to help!

# Your scope of prototyping for this week



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- Communicating your concept
- Low fidelity VS. high fidelity
- Testing just one feature VS. full concept
- Time is limited recommendation to start doing



# Thingiverse

#### IdeaSquare The innovation space at CERN